

## In the United States Patent and Trademark Office

Applicant(s)

Douglas B. Wilson

Serial No.

10/720,821

Filed

11/24/2003

Title

FATIGUE RELIEVING SUPPORT FOR STEERING

WHEELS AND THE LIKE

Examiner

Vinh Luong

Unit

3682

#### CERTIFICATE UNDER 37 C.F.R. § 1.10

I hereby certify that the attached papers are being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" Mailing Label No. EV 224760559 US addressed to: Mail Stop Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below

on August 25, 2006.

## APPEAL BRIEF UNDER 37 C.F.R. §1.192

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

SIR:

This is an Appeal Brief pursuant to the Notice of Appeal filed May 31, 2006 appealing the rejection of claims 20-28 in the Office Action dated May 9, 2006.

#### **REAL PARTY IN INTEREST** I.

08/28/2006 TBESHAH1 00000039 080219 10720821

The real party in interest is Douglas B. Wilson, 20 Nichols Road 2 Cohasset 2 MA 0 2025, Applicant/Appellant.

### II. RELATED APPEALS AND INTERFERENCES

Appellant has filed an Appeal with regard to U.S. Patent Application Ser. No. 10/727,306 filed December 3, 2003, on even date. U.S. Patent Application Ser. No. 10/727,306 is a continuation-in-part of the present application. A number of issues to be decided in the Appeal with regard to U.S. Patent Application Ser. No. 10/727,306 are the same or similar to the issues to be decided in the present Appeal. Therefore, the decisions in the Appeal related to U.S. Patent Application Ser. No. 10/727,306 would directly affect or have a bearing on the Board's decision in this Appeal.

#### III. STATUS OF THE CLAIMS

Claims 20-28 are pending in the present application. Claims 1-19 and 29-38 were cancelled in Appellant's Amendment dated September 26, 2005. Claims 20-28 have been twice rejected under 35 U.S.C. §102 in light of U.S. Patent No. 1,575,848 to Laubach et al. ("Laubach"), U.S. Patent No. 2,118,540 to Van Arsdel ("Van Arsdel"), and U.S. Patent No. 2,134,020 to Anson ("Anson"). More specifically, the Examiner relied on Van Arsdel or Anson in rejecting claims 20-26 and 28/20 for anticipation, and Laubach in rejecting claims 20, 27, and 28 for anticipation. These rejections to claims 20-28 are being appealed.

#### IV. STATUS OF AMENDMENTS

Claims 1-19 were the original application claims. Claims 20-28 were added to the present application in the Amendment filed May 11, 2005 along with now cancelled claims 29-38. The Examiner responded to the May 11<sup>th</sup> Amendment by issuing a restriction requirement in the Office Action dated May 27, 2005. In Applicant's July 22, 2005 response to the restriction requirement, Applicant selected claims 1-9, 16/6, 17/1, 18/1, 20-27, 28/20, and 28/27 as the species to prosecute in the present application. These claims were directed to the species that the Examiner indicated were shown in Figures 1, 3, and 4 of the application.

Appellant and the undersigned conducted an in-person interview with the Examiner on September 20, 2005. Appellant filed the Amendment dated September 26, 2005 following the interview. In that Amendment, Appellant cancelled claims 1-19 and 29-38, leaving only claims

20-28 pending in the present application. Appellant also amended claim 20 as agreed in the interview to overcome a 35 U.S.C. §12, second ¶, indefiniteness rejection.

Claims 20-28 were rejected in the Office Action dated October 18, 2005. In the Response filed November 3, 2005, Appellant first amended pending claim 20 to overcome the Examiner's bases for his anticipation rejection.

Appellant filed a Request for Continued Examination (RCE) on November 25, 2005. On December 2, 2005, Appellant filed a Supplemental Response to the RCE filed on November 25, 2005. In the Supplemental Response, Appellant repeated his amendment to claim 20 to overcome the Examiner's bases for rejecting claims 20-28 for anticipation. There were no further amendments to claims 20-28.

In the Office Action dated January 13, 2006, the Examiner issued a first rejection of claims 20-28 in the RCE. In the Response dated April 4, 2006, Appellant addressed the Examiner's bases for rejecting amended claims 20-28 without further amendment to claims 20-28. In the Office Action dated May 9, 2006, the Examiner issued a second rejection of claims 20-28. Appellant filed a Notice of Appeal on May 31, 2006.

Claims 20-28, as amended in the Supplemental Response dated November 25, 2005, are hereby presented in this Appeal.

## V. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention is directed to a novel system and method that is associated with a steering wheel for relieving or preventing fatigue when driving a vehicle for extended periods of time. The system will at least provide support for a portion of the driver's body, such as wrists, to relieve or prevent fatigue. (Specification: Page 2, lines 5-10) Of the pending claims, claim 20 is an independent claim and claims 21-28 depend directly or indirectly from claim 20.

Claim 20 recites a fatigue relieving/preventing apparatus that has two sections.<sup>1</sup>

According to claim 20, the first section connects to the periphery of the steering wheel.

(Specification: Page 3, lines 18-23) The second section connects to, and extends outward from, the first section at an angle to a plane across the face of the steering wheel. The second section may be made from a deformable material that will support, for example, the driver's wrists, as long as the pressure on the second section is less than the pressure necessary to deform it.

-

<sup>&</sup>lt;sup>1</sup> Appendix A contains a full version of amended claim 20.

However, when greater than the deforming pressure is applied to the second section, such as in an emergency, this section will deform out of the interference with the driver's ability to grab the steering wheel. (Figures 1, 2, 3, 4; Specification: Page 3, lines 18-29; Page 4, lines 4-16; Page 5, lines 5-24)

Claims 21-28 add further limitations to claim 20. Claim 21 adds that the second section is deformable in at least one direction when deforming pressure is applied to it. (Figure 4; Specification: Page 5, lines 5-18) Claim 22 adds that the second section supports a body portion, such as the wrist, when pressure is applied in at least one direction. (Figure 3; Specification: Page 4, line 29 to Page 5, line 7) Claim 23 adds that the steering wheel may control nautical vessels, aircraft, or ground transportation vehicles. (Specification: Page 2, lines 17-20; Page 7, original claim 4) Claim 24 adds that the second section will return to its original position once the deforming pressure is removed. As such, it has memory. (Specification: Page 5, lines 19-24) Claim 25 adds that the second section can support the forearm, wrist, or hand. (Specification: Page 5, lines 1-4; Page 7, original claim 6) Claim 26 adds that the first section extends a predetermined length of the periphery of the steering wheel (Figures 1 and 2; Specification: Page 3, lines 18-29; Page 4, lines 22-28; Page 7, original claim 7) Claim 27 adds that the second section includes at least two sections that connect to the first section. (Figure 2; Specification: Page 4, lines 4-7) Claim 28 adds that the first section may be deformable. (Specification: Page 3, lines 18-22)

A significant aspect of the present invention is that the second section will deform out of interference with the operation of the steering wheel if it is grabbed in an emergency. This is shown graphically in Figure 4. The result is a novel apparatus that relieves or prevents fatigue when driving for extended periods of time but does not prevent the driver from grabbing the wheel in emergencies.

#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 20-28 were first rejected in the Office Action dated January 13, 2006. In that Office Action, the Examiner rejected claims 20-28 on the following bases:

- A. Claims 20-26 and 28/20 under 35 U.S.C. §102(b) for allegedly being anticipated by Van Arsdel;
- B. Claims 20-26 and 28/20 under 35 U.S.C. §102(b) for allegedly being anticipated by Anson; and

C. Claims 20, 27, and 28/27 under 35 U.S.C. §102(b) for allegedly being anticipated by Laubach.

The Examiner issued a second rejection of claims 20-28 in the Office Action dated May 9, 2006. In that Office Action, the Examiner rejections advanced were on the same grounds as the first rejection, notably:

- A. Claims 20-26 and 28/20 under 35 U.S.C. §102(b) for allegedly being anticipated by Van Arsdel;
- B. Claims 20-26 and 28/20 under 35 U.S.C. §102(b) for allegedly being anticipated by Anson; and
- C. Claims 20, 27, and 28/27 under 35 U.S.C. §102(b) for allegedly being anticipated by Laubach.

Appellant requests that the Board review on Appeal and overturn the Examiner's bases for rejection set forth in the Office Action dated May 9, 2006.

As stated, a copy of amended claims 20-28 is attached as Appendix A. For the Board's convenience, a copy of Appellant's December 2, 2005, Supplemental Response, which includes Appellant's last claim amendments, is attached as Appendix B; the January 13, 2006, Office Action is attached as Appendix C; Appellant's April 4, 2006, Response is attached as Appendix D; and the May 9, 2006, Office Action is attached as Appendix E.

#### VII. ISSUE

Appellant, contrary to the contentions of the Examiner, submits that amended claims 20-28 are (1) not anticipated by Van Arsdel under 35 U.S.C. §102(b), (2) not anticipated by Anson under 35 U.S.C. §102(b), and (3) not anticipated by Laubach under 35 U.S.C. §102(b).

### VIII. GROUPING OF CLAIMS

Claims 20-28 are presented on appeal and the respective claims do not stand or fall together. Each of the claims recites a distinct set of claim elements that are separately patentable from the other claims.

#### IX. ARGUMENT

#### A. General

The Examiner has rejected claims 20-26 and 28/20 under 35 U.S.C. §102(b) for anticipation based on Van Arsdel or Anson, and claims 20, 27, and 28/27 under 35 U.S.C. §102(b) for anticipation based on Laubach. The standard for sustaining a rejection for anticipation is that a single prior art reference must disclose each and every limitation of the claim. See, e.g., Schering Corp. v. Geneva Pharma., Inc., 339 F.3d 1373, 1377 (Fed. Cir. 2003) ("[a] patent [claim] is invalid for anticipation if a single prior art reference discloses each and every limitation of the claimed invention"); Trintec Industries, Inc. v. Top-USA Corp., 295 F.3d 1292, 1295 (Fed. Cir. 2002) ("[a] single prior art reference anticipates a patent claim if it expressly or inherently describes each and every limitation set forth in the patent claim.... Inherent anticipation requires that the missing descriptive material is 'necessarily present,' not merely probably or possibly present, in the prior art"); Brown v. 3M, 265 F.3d 1349, 1351 (Fed. Cir. 2001) ("[t]o anticipate, every limitation of the claimed invention must be found in a single prior art reference, arranged as in a claim"); Kloster Speedsteel AB v. Crucible, Inc., 794 F.2d 1565, 1571 (Fed. Cir. 1986) ("absent from the reference of any claimed element negates anticipation"). Neither Van Arsdel, Anson, nor Laubach meet this standard.

## B. Van Arsdel Does Not Anticipate Claims 20-26 and 28/20

The Examiner rejected claims 20-26 and 28/20 as being anticipated by Van Arsdel. In order to demonstrate that Van Arsdel includes each of the elements of claim 20, the Examiner principally relies on the Van Arsdel's Figures and Examiner-annotated versions of Figures 3 and 5 of Van Arsdel.<sup>2</sup> In his rejection, the Examiner states that reference no. 4 (in the Van Arsdel Figures) equates to the first section and reference no. 2 (in the Van Arsdel Figures) equates to the second section of claim 20. Appellant submits that the Examiner fails to consider and appreciate all of the elements of the second section because if he does, two things are clear: (i) the grip-rest is in a plane parallel with the one across the face of the steering wheel and (ii) there is a missing element. Therefore, Van Arsdel does not establish a prima facie basis of anticipation, even considering the "broadest reasonable interpretation" standard recited by the Examiner in the Office Action.

At least one missing element from the Van Arsdel teachings is underlined in the following quotation:

6

<sup>&</sup>lt;sup>2</sup> The annotated versions of Figures 3 and 5 are Attachment 1 to the Office Action dated May 9, 2006. (Appendix E)

The second section extends from the first section outward at an angle to a plane across the face of the steering wheel, the second section for supporting at least a portion of a vehicular operator's body when pressure from the portion of the vehicular operator's body on the second section is less than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel, and deforming out of interference with the vehicular operator's ability to operate the steering wheel when pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for performing the second section out of interference with the vehicular operator's ability to operate the steering wheel. [Emphasis added.]

The Examiner's citation to Van Arsdel to support his contention that it teaches each of the elements of the second section is the following:<sup>3</sup>

The rotation of the steering wheel by hand pressure against the flanges 4 and 5 is assisted by the palm and fingers which are wrapped around the rim of the wheel, and to increase the finger hold the grip-rest 2, which is thickened and bifurcated to straddle the rim as shown in Fig. 6, is provided with recesses separated by ridges here shown as three in number, 6, 7, and 8....

The weight of the hand and arm are comfortably supported with the bottom of the hand resting in the concavity of the grip-rest as shown in Fig. 1, or with the ball of the thumb seated in the concavity as shown in Fig. 2....

My improved grip-rest may be formed integral with the rim of the steering wheel as shown in Fig. 8, but I prefer to make it removable as an attachment for any make of car and also to make it adjustable to suit the requirements or fancy of the driver.

Van Arsdel, Page 1, Right Column, Lines 29-54.

The Examiner contends that the grip-rest is deformable; however Appellant submits this is not supported by Van Arsdel. Van Arsdel requires the following to move the grip-rest: loosen the screw, reposition the grip-rest, and retighten the screw. (Van Arsdel, Page 2, Left Column, Lines 28-32) Appellant submits that this is not deforming according to claim 20 during normal use of the grip-rest. Once the grip-rest of Van Arsdel is in place, it is fixed, and does not move. Thus, Van Arsdel is missing the deforming element.

Appellant's position on the teachings of Van Arsdel is supported by the reference:

The grip-rest 2 is concave longitudinally and about half of the rest extends over and part way across a steering wheel rim 3 in a manner to slope downwardly and inwardly of the rim. The outer edge 4 on the side, and 5 on the rear end of the concave, located above the rim, extends up into a marginal flange to be contacted by the inside of the ball

<sup>&</sup>lt;sup>3</sup> See Office Action dated May 9, 2006, p. 3. (Appendix E)

of the thumb by the bottom of the hand, depending upon which part of the hand is seated on the rest. These flanges 4 and 5 enable the operator instantly to feel any deviation of the car from a straight course and gives him something substantial to push against in resistance and also in rotating the wheel to steer the car around corners and curves and away from obstructions or bad places in the roadway. [Emphasis added.]

Van Arsdel, Page 1, Right Column, Lines 13-28.

The quotation immediately above clearly demonstrates that the grip-rest of Van Arsdel does not deform according to claim 20 when pressure is applied to it. Noting this, Van Arsdel is missing at least one element and, as such, it cannot establish a prima facie basis of anticipation.

Claims 21-26 and 28/20 depend from claim 20. As such, each of these claims has all of the features of claim 20. Therefore, claims 21-26 and 28/20 are not anticipated by Van Arsdel for at least the same reasons as Claim 20.

In Section V above, Appellant states what claims 21-26 and 28/20 add to what is claimed in claim 20. These separate combinations, namely 20/21, 20/22, 20/23, 20/24, 20/25, 20/26, and 20/28, each provides bases for not being anticipated, which includes the reasons claim 20 is not anticipated by Van Arsdel.

Noting the foregoing, Appellant has demonstrated clearly that claims 20-26 and 28/20 are not anticipated by Van Arsdel and respectfully request that this basis for rejection be reversed.

### C. Anson Does Not Anticipate Claims 20-26 and 28/20

The Examiner rejected claims 20-26 and 28/20 as being anticipated by Anson. Relying on Examiner-annotated versions Figures 1, 2, and 8 of Anson, the Examiner states that reference no. 13 equates to the first section and reference no. 11 equates to the second section of claim 20.<sup>4</sup> However, it is important to review the description of the Anson attachment on which the Examiner puts tremendous weight in considering the issue of anticipation:

I have found that in the driving of an automobile and particular when driving for extended periods of time over long distances, the normal manner of holding and manipulating the steering wheel, wherein both driver's hands grasp the wheel and positions which require the driver's arms remain in a raised and more or less unnatural and uncomfortable position, considerable strain develops in the driver's hands, arms, shoulders and back particularly, and results in excess of fatigue...

<u>To obviate these disadvantages</u>, I have devised an attachment for steering whees, which permits a driver to assume a completely comfortable and relaxed driving

<sup>&</sup>lt;sup>4</sup> See Office Action dated May 9, 2006, p. 4. (Appendix E)

position, while at the same time, affords a means permitting the driver to at all times retain positive operating control of the steering wheel. [Emphasis added]

Anson, Page 1, Left Column, Lines 6-25.

The steering wheel attachment of Anson is described as follows:

The attachment comprises a hand grip portion 11, which is preferably of <u>bulbular</u> form.... Grip portion 11 normally extends downward from the wheel rim and is of <u>suitable length to adapt same to extend to the region of the driver's lap so that it may be grasped by the driver's hand when his hand is resting in a normal comparable position in his lap. Grip portion 11 is reduced in cross-sectional area at one end to form a neck 12. Neck 12...will have sufficient pliability...to be deflected from its <u>normal pendant position without adversely affecting the measure of control of the steering wheel movements afforded by the positive operating movement of the attachment, while at the same time, neck 12 will retain sufficient rigidity to permit operating movements of hand grip 11 to be positively communicated to the steering wheel rim for effective control of its movements. [Emphasis added]</u></u>

Anson, Page 1, Right Column, Line 49 – Page 2, Left Column, Line 18.

The Examiner has cited Anson at Page 2, Left Column, Lines 62-72, as teaching the deformability element of the second section in claim 20. As the quotation above demonstrates, when the Anson handgrip is in use, it is in the pendant position below the steering wheel and used to steer the vehicle. If, during normal operations, the driver were to grab the steering wheel in an emergency situation, he would release the handgrip and grab the wheel, for example, at the 10 and 2 o'clock positions. In doing so, the pendant-hanging handgrip would not be deformed as set forth in claim 20 because it would not be in use at all. Moreover, if it were used, it would not be deformed out of interference but would be held in the pendant position to steer the vehicle and not released.

The Examiner has stated the handgrip of Anson equates to deformation according to claim 20 because it may be moved from the bottom pendant position to the top of the steering wheel. When the handgrip is moved to the top, it is moved there to be placed purposefully out of use all the time. As such, it will not be in a position to be deformed as set forth in the second section of claim 20.<sup>5</sup> If the handgrip is moved to the top of the steering wheel, as suggested by the Examiner, it would be awkward and dangerous to use for driving because the driver's hands would be disposed through the steering wheel. In this position, it also would not provide any of

<sup>&</sup>lt;sup>5</sup> Anson, Page 2, Left Column, Lines 68-72.

the benefits recited in Anson to relieve fatigue in the arms and hands of the driver. In order to move the handgrip, it would be understood that the vehicle would have to be stopped, the handgrip detached and repositioned at the top, and reattached. Noting this, Anson is missing at least the deforming element of claim 20 and, as such, it does not support a prima facie basis of anticipation.

Claims 21-26 and 28/20 depend from claim 20. Thus, each of these claims has all of the features of claim 20. Therefore, claims 21-26 and 28/20 are not anticipated by Anson for at least the same reasons as claim 20.

In Section V above, Appellant sets forth what claims 21-26 and 28/20 add to claim 20. These separate combinations, namely 20/21, 20/22, 20/23, 20/24, 20/25, 20/26, and 20/28, each provides bases for not being anticipated, which includes the same reasons claim 20 is not anticipated by Anson.

Noting the foregoing, Appellant has demonstrated clearly that claims 20-26 and 28/20 are not anticipated by Anson and respectfully request that this basis for rejection be reversed.

## D. Laubach Does Not Anticipate Claims 20, 27, and 28/27

The Examiner rejected 20, 27, and 28/27 for anticipation based on Laubach. The Examiner relies on the Examiner-annotated version Figure 2 of Laubach and indicates that reference nos. 7 and 8 equates to the first section and reference no. 10 equates to the second section of claim 20.<sup>6</sup> Appellant submits that Laubach does not form a prima facie basis of anticipation because at least one element is missing.

Laubach states the following with regard to the knobs attached to the steering wheel:

By particularly considering the Figures 2 and 3, it will be seen that the knobs 2 are secured to the rim of the wheel 1 by means of securing screws 4, these screws being threaded as indicated at 5 longitudinally through the knob 2, and extending for quite a distance through the entire length of the knobs, thereby efficiently bracing the same. The inner ends of the knobs 2 are concave as indicated at 6, so as to conform to the contour of the outer periphery of the wheel 1...

Each knob 2 is provided with a plurality of finger sockets 9 upon the upper face thereof, and an enlarged head portion 10 at the outer end thereof, for the purpose of facilitating the gripping of the knob and preventing the actual slippage of the hand of the operator from the knob 2. [Emphasis added]

Laubach, Page 1, Lines 43–71.

<sup>&</sup>lt;sup>6</sup> See Office Action dated May 9, 2006, pp. 5-6. (Appendix E)

The description of the knobs and a review of the Figures makes plain that the knobs are not deformable and they are not disposed at an angle with respect to the plane across the face of the steering wheel. The knobs are rigidly connected to the steering wheel by screws 5. Any movement of them requires removing the screws, drilling the wheel at a new location, and reattaching the knobs at the new location. At this new location, the knobs will be in a plane parallel to the plane across the face of the steering wheel.

The knobs do not deform out of interference with the operation of the steering wheel as does the second section of claim 20. In fact, once the Laubach knobs are secured by screws 5 as shown and described, they are fixed and not movable during normal operations. If they are <u>not</u> unscrewed, the only movement would be to apply a destructive force to the knobs, thereby breaking them. Therefore, Laubach does not support a prima facie basis of anticipation because it is missing at least one element of claim 20 relating to deformation of the knobs out of interference with the operation of the steering wheel in the normal operation of the knobs.

As Appellant previously stated, claims 27 and 28/27 depend from claim 20. As such each of these claims have all of the features of claim 20. Therefore, claims 27 and 28/27 are not anticipated by Laubach for the same reasons as claim 20.

Section V above states what claims 27 and 28/27 add to the invention of claim 20. These separate combinations, namely 20/27 and 20/28, each provides bases for not being anticipated, which includes the reasons claim 20 is not anticipated by Laubach.

Noting the foregoing, Appellant has demonstrated clearly that claims 20, 27, and 28/27 are not anticipated by Laubach and respectfully request that this basis or rejection be reversed.

### X. CONCLUSION

In the foregoing, Appellant has clearly traversed each of the Examiner's bases for rejecting amended claims 20-28 under 35 U.S.C. §102 for allegedly being anticipated by Van Arsdel, Anson, and Laubach. Accordingly Appellant requests that the Board reverse these outstanding rejections and remand the application to Examiner and direct that the application be sent to issue.

No fees are believed due; however, please charge any additional fees due or overpayments to Deposit Account No. 08-0219.

Respectfully submitted,

Dated: August 25, 2006 Wayne M. Kennard

Registration No. 30,271 Attorney for Appellant

Wilmer Cutler Pickering Hale and Dorr LLP 60 State Street

Boston, MA 02109

Tel: 617-526-6183 Fax: 617-526-5000 Appendix A: A copy of claims 20-28

Appendix B: A copy of Appellant's December 2, 2005, Supplemental Response

Appendix C: A copy of the Office Action dated January 13, 2006

Appendix D: A copy of the Response dated April 4, 2006

Appendix E: A copy of the Office Action dated May 9, 2006

#### APPENDIX A

Claims:

Claims 1-19 (canceled)

- 20. (Previously Presented) A fatigue relieving/preventing apparatus associated with a steering wheel for controlling a vehicle comprising:
- a first section that connects to a peripheral portion of the steering wheel; and a second section that connects to, and extends from, the first section at the peripheral portion of the steering wheel, the second section extends from the first section outward at an angle to a plane across a face to the steering wheel, the second section for supporting at least a portion of a vehicular operator's body when pressure from the portion of the vehicular operator's body on the second section is less than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel, and deforming out of interference with the vehicular operator's ability to operate the steering wheel when pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel.
- 21. (Original) The apparatus as recited in claim 20, wherein the second section is deformable in at least one direction when deforming pressure is applied to such second section.
- 22. (Original) The apparatus as recited in claim 20, wherein the second section supports a portion of the vehicular operator's body when pressure from such body portion is applied in at least one direction.
- 23. (Original) The apparatus as recited in claim 20, wherein the steering wheel includes a steering wheel for controlling at least a nautical vessel, an aircraft, or a ground transportation vehicle.
- 24. (Original) The apparatus as recited in claim 20, wherein the second section will return to an original first position after deforming pressure is removed therefrom.
- 25. (Original) The apparatus as recited in claim 20, wherein the portion of the body supported by the second section includes at least a forearm, wrist, or hand.
- 26. (Original) The apparatus as recited in claim 20, wherein the first section extends a length of a predetermined peripheral portion of the steering wheel.

- 27. (Original) The apparatus as recited in claim 20, wherein the second section includes at least two second sections that each connect to the first section at separate locations.
- 28. (Original) The apparatus as recited in claim 20 or 27, wherein the first section is deformable.

#### APPENDIX B

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Wilson

Examiner: Vinh Luong

Serial No.:

10/720,821

Art Unit: 3682

Filing Date:

November 24, 2003

For:

FATIGUE RELIEVING SUPPORT FOR STEERING WHEELS AND

THE LIKE

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## **Supplemental Response**

Sir:

This supplements Applicant's response dated November 3, 2005 that is referenced in the RCE dated November 22, 2005. In this Supplemental Response, the claims begin on page 2 and the Remarks begin on page 4.

#### Claims:

Claims 1-19 (canceled)

20. (Currently Amended) A fatigue relieving/preventing apparatus associated with a steering wheel for controlling a vehicle comprising:

a first section that connects to a peripheral portion of the steering wheel; and a second section that connects to, and extends from, the first section at the peripheral portion of the steering wheel, the second section extends from the first section outward at an angle to a plane across a face to the steering wheel, with the second section for supporting at least a portion of a vehicular operator's body when pressure from the portion of the vehicular operator's body on the second section is less than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel, and deforming out of interference with the vehicular operator's ability to operate the steering wheel when pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel.

- 21. (Original) The apparatus as recited in claim 20, wherein the second section is deformable in at least one direction when deforming pressure is applied to such second section.
- 22. (Original) The apparatus as recited in claim 20, wherein the second section supports a portion of the vehicular operator's body when pressure from such body portion is applied in at least one direction.
- 23. (Original) The apparatus as recited in claim 20, wherein the steering wheel includes a steering wheel for controlling at least a nautical vessel, an aircraft, or a ground transportation vehicle.
- 24. (Original) The apparatus as recited in claim 20, wherein the second section will return to an original first position after deforming pressure is removed therefrom.
- 25. (Original) The apparatus as recited in claim 20, wherein the portion of the body supported by the second section includes at least a forearm, wrist, or hand.
- 26. (Original) The apparatus as recited in claim 20, wherein the first section extends a length of a predetermined peripheral portion of the steering wheel.

- 27. (Original) The apparatus as recited in claim 20, wherein the second section includes at least two second sections that each connect to the first section at separate locations.
- 28. (Original) The apparatus as recited in claim 20 or 27, wherein the first section is deformable.

#### Remarks

This Supplemental Response supports the Response dated November 3, 2005 that is referenced in the RCE dated November 22, 2005. For purposes of the RCE, claims 1-19 have been cancelled and claims 20 –28 are to be prosecuted in the present application. Noting this, only claims 20-28 will be currently pending in the present application.

Applicant submits the claims 20-28 are allowable in view of the rejections raised in the Examiner's Office Action dated October 18, 2005, that were overcome by the Applicant in the Response dated November 3, 2005. Noting this, the application and the claims therein are in condition for allowance. Accordingly, the application should be allowed in due course.

## Conclusion

The present invention is new, non-obvious and useful. Applicants have traversed each and every basis of rejection raised by the Examiner. As such, pending claims 20-28 are in condition for allowance. Reconsideration and allowance of the claims are respectfully requested.

Dated: December 2, 2005

Respectfully submitted,

Wayne M. Kennard

Attorneys for the Applicant

Wilmer Cutler Pickering Hale and Dorr LLP 60 State Street

Boston, MA 02109 Tel: 617-526-6183

Fax: 617-526-5000

Attorney Docket Number: 114089.120US2

Please find below and/or attached an Office communication concerning this application or proceeding.

WILMER CUTLER PICKERING
HALE and DORR LLP DOCKETING
RE: 1/4/08-7-7 DOCSD
Action Date: 4.73-06

Action to be Taken:
Docketed By: M.

DOCKCICG DOSIGNA

	A 11 41 M -	<del> </del>				
	Application No.	Applicant(s)	WILSON, DOUGLAS B.			
Office Action Summany	10/720,821					
Office Action Summary	Examiner	Art Unit				
	Vinh T. Luong	3682				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with	the correspondence ad	dress			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Fallure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATE  (a) In no event, however, may a repute a	ATION.  Ily be timely filed  IS from the malling date of this on  NDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on <u>02 De</u>	ecember 2005.					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This						
3) Since this application is in condition for allowar	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D.	11, 453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) 20-28 is/are pending in the application	٦. ِ					
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>20-28</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>24 November 2003</u> is/a	re: a)□ accepted or b)⊠ o	objected to by the Exam	niner.			
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correct	,	·				
11) The oath or declaration is objected to by the Ex	aminer. Note the attached	Office Action or form PI	O-152.			
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 1	19(a)-(d) or (f).				
1. Certified copies of the priority documents						
2. Certified copies of the priority documents			04			
3. Copies of the certified copies of the prior	•	sceived in this National	Stage			
application from the International Bureau  * See the attached detailed Office action for a list		aceived //	Λ			
See the attached detailed Office action for a list	or the contined copies not re	Hand	h			
		Vinh T. Luong				
		Primary Examiner	r			
Attachment(s)	Λ T 1-41 2					
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/	mmary (PTO-413) Mail Date				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 7/28/05.	5)	ormal Patent Application (PTC orments 1-3.	D-152)			

Art Unit: 3682

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 2, 2005 has been entered.
- 2. The drawings are objected to because each part of the invention, e.g., the angle and the face in claim 20 should be designated by a referential numeral or character.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 3682

- 3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the angle in claim 20 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
- 4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter, such as, "an angle," "a plane," and "a face" in claim 1. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction is required.
- 5. The disclosure is objected to because of the following informalities: each part of the invention, e.g., the angle and the face in claim 20 should be designated by a referential numeral or character. Appropriate correction is required.
- 6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 7. Claims 20-26 and 28/20 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Arsdel (US Patent No. 2,118,540).

Regarding claim 20, Van Arsdel teaches a fatigue relieving/preventing apparatus associated with a steering wheel 3 for controlling a vehicle comprising:

a first section 4 (i.e., horizontal section in Fig. 3) that connects to a peripheral portion 3 of the steering wheel 3; and

a second section 2 (i.e., upward section in Figs. 3 and 5) that connects to and extends from the first section 4 at the peripheral portion 3 of the steering wheel 3, the second section 2 extends from the first section 4 outward at an angle (see angle α in Figs. 3 and 5 of the Attachment 1) to a plane (Att. 1) across a face to the steering wheel 3, with the second section 2 inherently for supporting at least a portion of a vehicular operator's body (e.g., the hand as seen

Art Unit: 3682

in Figs. 1 and 2) when pressure from the portion of the vehicular operator's body on the second section 2 is less than the pressure for deforming the second section 2 out of interference with the vehicular operator's ability to operate the steering wheel 3, and deforming out of interference with the vehicular operator's ability to operate the steering wheel when pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel 3. *Ibid.*, right column on page 1, lines 29-54.

Regarding claim 21, the second section 2 is inherently deformable in at least one direction when deforming pressure is applied to such second section 2. Note that virtually anything will be deformed if enough pressure is applied to it. See the term "flexible" in *Fredman* v. Harris-Hub Co., Inc., 163 USPQ 397 (DC 1969).

Regarding claim 22, the second section 2 supports a portion of the vehicular operator's body when pressure from such body portion is applied in at least one direction.

Regarding claim 23, the steering wheel includes a steering wheel for controlling at least a nautical vessel, an aircraft, or a ground transportation vehicle.

Regarding claim 24, the second section 2 will inherently return to an original first position after deforming pressure is removed therefrom.

Regarding claim 25, the portion of the body supported by the second section includes at least a forearm, wrist, or hand.

Regarding claim 26, the first section 4 extends a length of a predetermined peripheral portion of the steering wheel 3.

Regarding claim 28/20, the first section 4 is inherently deformable. See the term

Art Unit: 3682

"flexible" in Fredman v. Harris-Hub Co., Inc., supra.

8. Claims 20-26 and 28/20 are rejected under 35 U.S.C. 102(b) as being anticipated by Anson (US Patent No. 2,134,020).

Regarding claim 20, Anson teaches a fatigue relieving/preventing apparatus associated with a steering wheel 10 for controlling a vehicle comprising:

a first section 13 that connects to a peripheral portion of the steering wheel 10; a second section 11 extends from the first section at the peripheral portion of the steering wheel 10, the second section 11 extends from the first section 13 outward at an angle (see angle α in Fig. 8 of Attachment 2) to a plane (Att. 2) across a face (Att. 2) to the steering wheel 3, the second section 11 inherently for supporting at least a portion of a vehicular operator's body (e.g., the hand) when pressure from the portion of the vehicular operator's body on the second section 11 is less than the pressure for deforming the second section 11 out of interference with the vehicular operator's ability to operate the steering wheel 10, and deforming out of interference with the vehicular operator's ability to operate the steering wheel 10 when pressure from the portion of the vehicular operator's body on the second section 11 is equal to or greater than the pressure for deforming the second section 11 out of interference with the vehicular operator's ability to operate the steering wheel 10.

Regarding claim 21, the second section 11 is deformable in at least one direction when deforming pressure is applied to such second section 11 since it is made of a flexible material such as rubber. *Ibid.*, right column on page 1, lines 46-53. On the other hand, note that virtually anything will be deformed if enough pressure is applied to it. See the term "flexible" in *Fredman v. Harris-Hub Co., Inc., supra.* 

Art Unit: 3682

Regarding claim 22, the second section 11 supports a portion of the vehicular operator's body when pressure from such body portion is applied in at least one direction.

Regarding claim 23, the steering wheel 10 includes a steering wheel for controlling at least a nautical vessel, an aircraft, or a ground transportation vehicle.

Regarding claim 24, the second section 11 will return to an original first position after deforming pressure is removed therefrom since it is made of a flexible material such as rubber. *Ibid.*, right column on page 1, lines 46-53.

Regarding claim 25, the portion of the body supported by the second section includes at least a forearm, wrist, or hand.

Regarding claim 26, the first section 13 extends a length of a predetermined peripheral portion of the steering wheel 10.

Regarding claim 28/20, the first section 13 is deformable since it is made of a flexible material such as rubber. *Ibid.*, left column on page 2, lines 19-34. See also the term "flexible" in *Fredman v. Harris-Hub Co., Inc., supra*.

9. Claims 20, 27 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Laubach (US Patent No. 1,575,848).

Regarding claim 20, Laubach teaches a fatigue relieving/preventing apparatus associated with a steering wheel 1 for controlling a vehicle comprising:

a first section 7, 8 that connects to a peripheral portion of the steering wheel 1;

a second section 10 that connects to, and extends from, the first section 7, 8 at the peripheral portion of the steering wheel 1, the second section 10 extends from the first section 7, 8 outward at an angle (see angle  $\alpha$  in Fig. 2 of the Attachment 3) to a plane (Att. 3) across a face

Art Unit: 3682

(Att. 3) to the steering wheel 1, the second section 10 inherently for supporting at least a portion of a vehicular operator's body (e.g., the hand) when pressure from the portion of the vehicular operator's body on the second section 10 is less than the pressure for deforming the second section 10 out of interference with the vehicular operator's ability to operate the steering wheel 1, and deforming out of interference with the vehicular operator's ability to operate the steering wheel 1 when pressure from the portion of the vehicular operator's body on the second section 10 is equal to or greater than the pressure for deforming the second section 10 out of interference with the vehicular operator's ability to operate the steering wheel 1.

Regarding claim 27, the second section 10 includes at least two second sections 10 that each connect to the first section 7, 8 at separate locations (by comparing Applicant's Fig. 2 with Laubach's Fig. 1).

Regarding claims 28/20 and 28/27, the first section 10 is inherently deformable. See the term "flexible" in Fredman v. Harris-Hub Co., Inc., supra.

10. Applicant's arguments filed December 2, 2005 and November 3, 2005 have been fully considered but they are not persuasive.

## Applicant contended:

Of the five patents, Laubach, Anson, Van Arsdel, and Berzer, among other things, disclose an element that engages the hand of the driver that is disposed outward or inward from the steering wheel rim in the plane across of the face of the steering wheel. As set forth in claims 20-28, the second section of the fatigue-relieving apparatus is disposed outward at an angle to the plane across the face of the steering. This distinguishes claims 20-28 from each of these references.

Art Unit: 3682

It is well settled that the description of the article pictured can be relied on, in combination with the drawings, for what they would reasonably teach one of ordinary skill in art. See *In re Wright*, 569 F.2d 1124, 193 USPQ 332, 335 (CCPA 1977). Moreover, it is well settled that although patent drawings are not working drawings, this does not mean that things clearly shown in drawings of reference patent are to be disregarded in determining patentability of the claims. Simply put, things clearly shown in reference patent drawing qualify as prior art features, even though unexplained by the specification as long as they are not inconsistent with the specification. *In re Mraz*, 173 USPQ 25 (CCPA 1972).

In the instant case, the Examiner respectfully submits that Laubach, Anson, and Van Arsdel, among other things, disclose the element that engages the hand of the driver that is disposed outward or inward from the steering wheel rim in the plane across of the face of the steering wheel as seen by the angle  $\alpha$  in the Attachments 1-3.

The rejections based on Shipley and Berzer are withdrawn in view of Applicant's amendments. Applicant's arguments regarding Shipley and Berzer are deemed to be moot.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinh T. Luong whose telephone number is 571-272-7109. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Luong January 9, 2006

Vinh T. Luong Primary Examiner

Art Unit: 3682

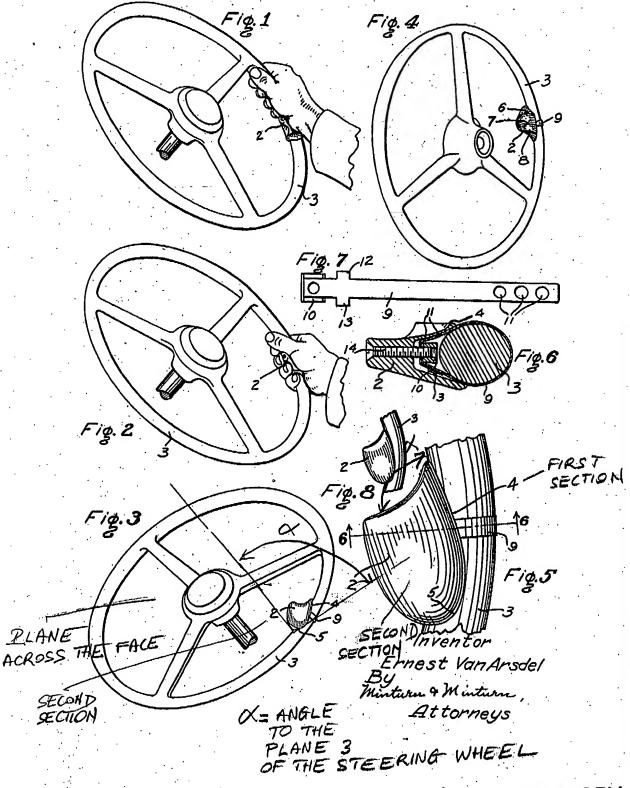
## **ATTACHMENT 1**

May 24, 1938.

## E. VAN ARSDEL

2,118,540

AUTO STEERING WHEEL HANDGRIP Filed May 10, 1937



BEST AVAILABLE COPY

Art Unit: 3682

# **ATTACHMENT 2**

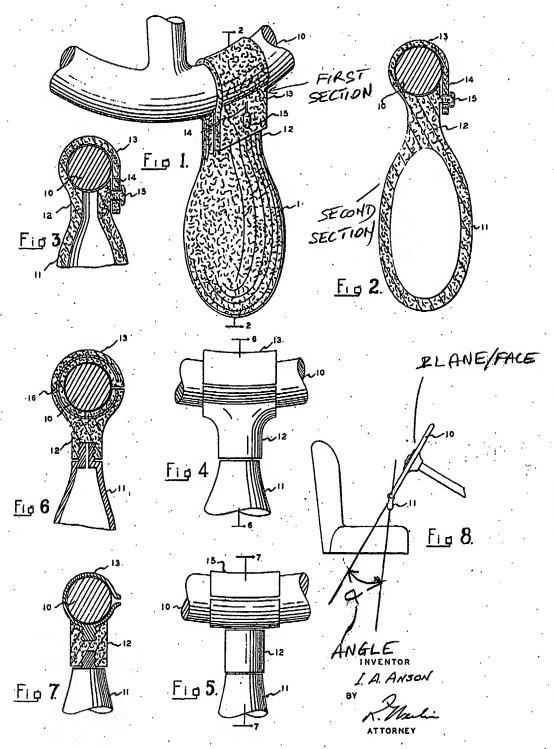
Oct. 25, 1938.

I. A. ANSON

2,134,020

STEERING WHEEL ATTACHMENT

Filed Sept. 30, 1937



BEST AVAILABLE COPY

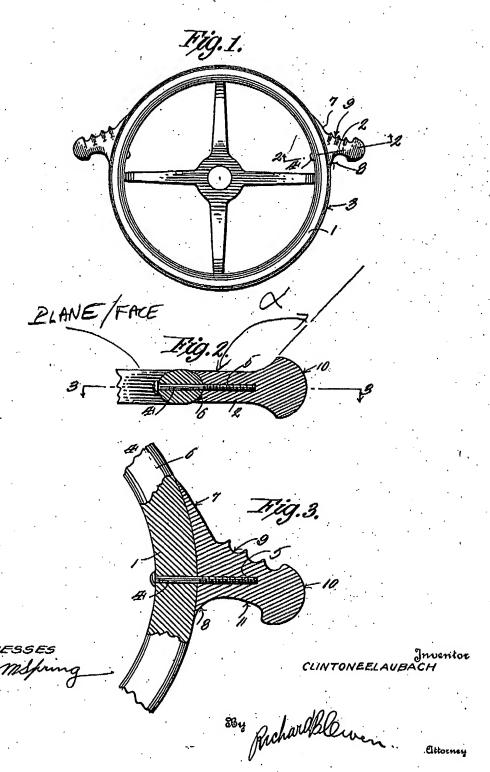
Art Unit: 3682

# **ATTACHMENT 3**

March 9, 1926.

1,575,848

C. E. E. LAUBACH
STEERING WHEEL
Filed July 13, 1925



	Subt. For, PTO	D-1449 DRMATION	N DISCLOS	SURE	Docket Number 114089.120	Application Number 10/720,821
JUL 2	8 2005 15	IN AN API	PLICATIO!	V	Applica Wilso	
E. S.	<b>3 3</b> (US	se severai sii	0015 II 110C <del>0</del> 5		Filing Date	Group Art Unit
WA TRA	be Sheet	1	OF	1	November 24, 2003	<del>2616</del> 3682

U.S. Patent Documents				
Examiner Initial	Document Number	Publn. Date mm-dd-yyyy	Name Of Patentee Or Applicant Of Cited Documents	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
VL	US-6,658,965	12-2003	Allen	
NL	US-5,167,554	12-1992	Tager et al.	
٧L	US-4,894,033	01-1990	Chang	

Foreign Patent Documents					
Examiner Initial	Cite No.	Foreign Patent Document Country Code-Number- Kind	Pubin, Date mm-dd-yyyy	Country	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
					· · · · · · · · · · · · · · · · · · ·

Examiner's Initial	Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)			
	·			

EXAMINER LUONG	DATE CONSIDERED 1/11/06				
EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant.					

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Wilson

Examiner: Vinh Luong

Serial No.:

10/720,821

Art Unit: 3682

Filing Date:

November 24, 2003

For:

FATIGUE RELIEVING SUPPORT FOR STEERING WHEELS AND

THE LIKE

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### Response

Sir:

This is a Response to the Office Action dated January 13, 2006. This Response places the application and the claims therein, in condition for allowance. In this Response, the amendments to the specification begins on page 2 and the Remarks begin on page 5.

#### **Specification:**

Page 2, please rewrite the third full paragraph as follows:

The system of the present invention will include at least one part that <u>extends</u> outward at an angle from a plane across the face of the steering wheel or vehicular <u>control</u>. This part is at least partially deformable in at least one direction, so that the system will not interfere with the operation of the wheel or control. This deformability, however, will not impede the support function of the system on the invention. Furthermore, the deformable material has memory, so that after a deforming force is removed, it resumes its original predeformation configuration and shape, which is extending outward at an angle from a plane across the face of the steering wheel or vehicular control.

Page 3, please rewrite the seventh full paragraph as follows:

Deformable material second section 102 extends outward from steering control 105 over a predetermined section of the steering control, which is shown in Figure 1 to be an arc. As is better shown in Figure 3, a deformable second section such as 102 extends outward at an angle from a plane across the face of a steering control such as 105.

Deformable second section 102 may extends outward from the steering control at or below the inside circumference of the control over the predetermined arc. This arc will typically include at least the ten 104 and two 106 o'clock positions, or may include the entire circumference.

Page 4, please rewrite the third and fourth full paragraphs as follows:

The first system of the present invention at 202 includes first section 204 that connects to steering control 211 and second section 205 that extends outward from first section 204. Further, a second section such as 205 extends outward at an angle from a plane across the face of a steering control such as 211 (see Figure 3). First section 204 may be rigid, semi-rigid, or deformable, while second section 205 is deformable. If the first section is deformable, it may have memory.

Similarly, the second system of the present invention at 203 includes first section 207 that connects to steering control 211 and second section 209 that extends outward

from first section 207. Further, a second section such as 209 extends outward at an angle from a plane across the face of a steering control such as 211 (see Figure 3). First section 207 may be rigid, semi-rigid, or deformable, while second section 209 is deformable. Again, if the first section is deformable, it may have memory.

Pages 5-6, please rewrite bridging paragraph as follows:

Referring to Figure 3, generally at 300, steering control 305 is shown that includes rim 308, spokes 310, and steering column 312. First section 301 is formed integral with rim 308 and deformable second section 302 extends outward from the first section. As is shown, second section 302 extends outward at angle 316 from plane 318 across the face of steering control 305. The material of second section 302 has sufficient strength that when driving, the driver may rest his/her wrists or portions of the hands 322 on the material and they will be supported. The structure is such that the weight of the arms and hands through the wrists or portions of the hands are supported without the material deforming.

Pages 5-6, please rewrite the bridging paragraph as follows:

Referring to Figure 5, generally at 500, a second embodiment of the present invention is shown. System 501 of the present invention shown in Figure 5 includes a first section 502 that detachably connects to steering control rim. Deformable second section 503 connects to, and extends outwardly from, first section 502. As is shown, deformable second section 503 extends outward at angle 516 from plane 518 across the face of steering control rim 508. First section 502 may snap-on or otherwise attach to the steering control such that it may appear integral with the steering control. One of many possible known means for accomplishing this is by first section 502 being mostly rigid, and leaving a space 507 so the attachment can be forced over rim 508 and leave room for the steering control spokes 510. Regardless of the means for attachment, once first section 502 is attached to the steering control, it will provide all of the benefits that have been described for the first section being integrally formed with the rim. Additionally, the second embodiment, may be a single structure with a single resting material support,

a single structure with multiple resting supports, or multiple structures each with its own resting support.

Page 6, please rewrite the first full paragraph as follows:

By way of example, Figure 6, generally at 600, shows another alternate method to attach the system of the present invention to steering control rim 608. The system in this figure has first section 602 that will envelop rim 608. First section 602 may be made from a flexible material. First section 602 may have a slit 611, which after this section envelops the rim, may be stitched shut by stitches 613. As in the other embodiments of the present invention, deformable second section 603 connects to, and extends outwardly from, first section 602. Further, a deformable second section such as 603 extends outward at an angle from a plane across the face of a steering control rim such as 608 (see Figures 3 and 5).

#### Remarks

### I. Introduction

Applicant is in receipt of the Office Action dated at January 13, 2006. The Examiner recited several grounds for objecting to or rejecting the present application. Examiner objected to the drawings for not including representations to the angular disposition of second section of the fatigue/relieving apparatus. In view of this objection to the drawings, the Examiner also has objected to the specification. Lastly, the Examiner rejected pending claims 20-28 under 35 U.S.C. 102(b) for anticipation based on either Van Arsdel, U.S. Patent No. 2,118,540; Anson, U.S. Patent No. 2,134,020; or Laubach, U.S. Patent No. 1,575,848. Applicant will demonstrate herein that the objections and rejections have been overcome by this Response, thereby placing the present application in condition for allowance.

## II. The Corrected Drawings Overcome the Examiner's Objection

On page 2 of the Office Action, the Examiner objected to the drawings because "each part of the invention, e.g., the angle and the face in claim 20 should be designated by a reference numeral or character." Applicant has corrected the drawings as requested by the Examiner. These changes to the drawings do not add new matter. As such, Applicant has traversed the Examiner's basis for objection to the drawings.

## III. The Specification, As Amended, Overcome the Examiner's Objection

On page 4 of the Office Action, the Examiner objected to the specification for "failing to provide proper antecedent basis for the claim the subject matter, such as, 'an angle,' 'a plane,' and 'a face' in claim 1." Applicant has amended the specification to overcome this objection. These amendments do not add new matter. Therefore, this objection should be withdrawn.

## IV. Claims 20-28 Are Not Anticipated Under 35 § U.S.C. 102(b)

Claims 20-28 are pending in the present application. In the current Office Action, claims 20-28 have been rejected by the Examiner for anticipation under 35 U.S.C. § 102

(b) based on a three references. These references are U.S. Patent No. 1,575,848 to Laubach ("Laubach"), U.S. Patent No. 2,118,540 to Van Arsdel ("Van Arsdel"), and U.S. Patent No. 2,134,020 to Anson ("Anson"). More specifically, the Examiner relied on Van Arsdel or Anson in rejecting claims 20-26, and 28/20; and Laubach in rejecting claims 20, 27, and 28. Hereinafter, Applicant will demonstrate that claims 20-28, as presently amended, place the present application in condition for allowance and the application should be passed to issue.

Based on Applicant's last response, the Examiner has withdrawn the anticipation rejections based on U.S. Patent No. 1,834,537 to Shipley ("Shipley"), and U.S. Patent No. 2,335,256 to Berzer ("Berzer"). Applicant would like to thank the Examiner for withdrawing these two patents as bases for rejection.

As stated in the previous Response, Laubach, Anson, and Van Arsdel, among other things, disclose an element that engages the hand of the driver that is disposed outward or inward from the steering wheel rim substantially in the plane across of the face of the steering wheel. As set forth in claims 20-28, the second section of the fatigue-relieving apparatus that supports, e.g., the hand of the driver, is disposed outward at an angle to the plane across the face of the steering. The second element also has the feature that it will "deform...out of interference with the vehicular operator's ability to operate the steering wheel when pressure from the portion of the vehicular operator's body on the second section equal to or greater than the pressure for performing the second section of interference with the vehicular operator's ability to operate the steering wheel." This deformation takes place with respect to the second section bending away from the first section that attaches to the steering wheel as shown in Figure 4. This and other features distinguish claims 20-28 from each of the references relied on by the Examiner in rejecting claims 20-28.

#### A. Applicable Law

In order for there to be anticipation under 35 U.S.C. §102, a single prior art reference must show each and every feature of the claimed invention in the same way. . Brown v. 3M, 265 F.3d 1349, 1351 (Fed. Cir. 2001) ("To anticipate, every limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim"); Kloster Speedsteel AB v. Crucible, Inc., 793 F.2d 1565, 1571 (Fed. Cir. 1986)

("absence from the reference of any claimed element negates anticipation"). Applicant submits that neither Van Arsdel, Anson, nor Laubach satisfy this standard for finding anticipation under 35 U.S.C. §102.

## B. Van Arsdel Does Not Anticipate Claims 20-26 and 28/20

Claim 20 is an independent claim and claims 21-26 and 28/20 depend from claim 20. As such, claims 21-26 and 20/20 add features to claim 20.

In relying on Van Arsdel, the Examiner does not cite to any descriptions of the auto steering wheel handgrip disclosed in this reference but annotates the drawings for this purpose. Specifically, the Examiner annotated Figures 3 and 8 in an attempt to show what is being claimed in claim 20. The Examiner indicates that what is shown at reference no. 4 equates to the first section in claim 20 and what is shown at reference no. 2 equates to the second section in that claim. Applicant believes that the Examiner fails to appreciate the description of the auto steering wheel handgrip that is described in Van Arsdel. Van Arsdel at column 2, lines 13-40 states:

The grip-rest 2 is concave longitudinally and about half of the rest extends over and part way across the steering wheel rim 3 in a manner to slope downwardly and inwardly of the rim. The outer edge 4 on the side, and 5 of the rear end of the concave, located above rim, extends up into a marginal flange to be contacted by the inside of the ball of the thumb or by the bottom of the hand, depending upon which part of the hand is seated on the rest. These flanges 4 and 5 enable the operator instantly to feel any deviation of the car from a street course and gives him something substantial to push against in resistance and also and rotating the wheel to steer the car around corners and curves and away from obstacles or bad places in the roadway.

The rotation of the steering wheel by hand pressure against the flanges 4 and 5 is assisted by the palm and fingers, which are wrapped around the rim of the wheel, and increase the fingerhold [on] the grip-rest 2, which is thickened and bifurcated to straddle the rim as shown in Fig. 6, is provided with recesses separated by ridges, here shown as three in number, 6, 7, and 8. [See Figure 4] The ends of the three last fingers of the operator's hand are seated in the recesses with the rib 6, 7, and 8, respectively, separating the fingers and increasing the grip of the hand on the wheel. [Emphasis added]

A review of Figures 3 and 5 as annotated by the Examiner to attempt to show that the auto steering wheel handgrip of Van Arsdel is disposed outward at an angle  $\alpha$  to a plane across the face of the steering wheel shows that the Examiner's position is

misplaced. As the description above from Van Arsdel indicates, the auto steering wheel handgrip is disposed as shown in Figure 6 parallel to the plane across the face of the steering wheel not at angle to it. This is very clear because in each disposition of the auto steering wheel handgrip in the Figures, the handgrip is fixed in this parallel plane to support the thumb or part of the palm. It is also fixed so that it is not deformable so the driver can put extensive pressure on it (and it will not move) for steering the automobile (see underscored sections in the quotation above).

If the handgrip was supposed to be at an angle α as the Examiner contends, the disposition of the handgrip would be shown differently in the drawings. As such, there is not support for the Examiner's contention that the handgrip is disposed other than in the plane parallel to the plane across the form of the steering wheel. Accordingly, one skilled in the art would not understand the auto steering wheel handgrip in Van Arsdel to be disposed as the Examiner contends. Moreover, there is no support in the description of the auto steering wheel handgrip in Van Arsdel that it will deform in any way out of interference with the operation of the steering wheel. Applicant submits he is justified in taking this position given the description of the connection of the hand grip as shown in Figure 6 or the integrally formed handgrip shown in Figure 8. Therefore, the auto steering wheel handgrip of Van Arsdel would not anticipate the invention as set forth in claim 20. Specifically, Van Arsdel at least does not teach or suggest the features of the second section being disposed outward at an angle from the plane across the face of the steering wheel and the handgrip of Van Arsdel does not deform as set forth in claim 20.

Noting in the foregoing, Applicant has demonstrated that the auto steering wheel handgrip of Van Arsdel does not anticipate (or render obvious) the invention of claim 20. Accordingly, Applicant respectfully requests that the anticipation rejection based on Van Arsdel be withdrawn.

Claims 21-26 and 28/20 depend from claim 20. As such, each of these dependent claims includes all the features of claim 20. Therefore, claims 21-26 and 28/20 are not anticipated by Van Arsdel for the same reasons that claim 20 is not anticipated by this patent. Thus, Applicant has traversed the Examiner's basis for rejecting claims 21-26 and 28/20 for anticipation and respectfully requests that this rejection be withdrawn.

### C. Anson Does Not Anticipate Claims 20-28

The Examiner has rejected claims 20-26 and 28/20 for anticipation based on Anson. Referring to the Figures of Anson, the Examiner has indicated that reference no. 13 equates to the first section recited in claim 20 and reference no. 11 equates to the second section of the claim. The Examiner has annotated Figure 8 to indicate that the steering wheel attachment of Anson is disposed at an angle  $\alpha$  with respect to a plane across the face of the steering wheel. Before addressing the Examiner's basis of rejection, Applicant submits that the description of the steering wheel attachment of Anson is germane to the Examiner's position on anticipation. Applicant also submits that if this description is taken into consideration, the Examiner should withdraw the anticipation rejection based on Anson.

In the description of the purpose of the steering wheel attachment in Anson, the patent states (Page 1, left column, lines 6-25):

I have found that in the driving of an automobile and particular when driving for extended periods of time over long distances, the normal manner of holding and manipulating the steering wheel, wherein both driver's hands grasp the wheel and positions which require the driver's arms remain in a raised and more or less unnatural and uncomfortable position, considerable strain develops in the driver's hands, arms, shoulders and back particularly, and results in excess of fatigue, such as will frequently dull the driver's normal reflexes and alertness and thereby increase the danger of accidents.

To obviate these this advantages, I have devised an attachment for steering wheels, which permits a driver to assume a completely comfortable and relaxed driving position, while at the same time, affords a means permitting the driver to at all times retain positive operating control of the steering wheel. [Emphasis added]

The steering wheel attachment of Anson is subsequently described in the patent. The following description is stated (Page 1, right column, line 49 – Page 2, left column, line 21):

The attachment comprises a hand grip portion 11, which is preferably of bulbular form and constructed of unflexible material such as rubber or a similar pliable composite material. Grip portion 11 normally extends downward from the wheel rim and is off a suitable length to adapt same to extend to the region of the driver's lap so that it may be grasped by the driver's hand when his hand is resting in a normal comparable position in his lap. Grip portion 11 is reduced in cross-sectional area at one end to

form a neck 12. Neck 12 is constructed the same composite material as hand grip 11 and it is a feature of this invention to utilize a composite material, which will have sufficient pliability to permit neck 12 to be deflected from its <u>normal pendant position</u> without adversely affecting the measure of control of the steering wheel movements afforded by the positive operating movement of the attachment, while the same time, neck 12 will retain sufficient rigidity to permit operating movements of hand grip 11 to be positively communicated to the steering wheel rim for effective control of its movements.

At one side of neck 12 is attached to tie strap 13 constructed of the same or similar material as that forming the handgrip and neck portions. [Emphasis added]

Applicant submits that the steering wheel attachment of Anson teaches away from the invention of claim 20. As set forth in the quotation above, the steering wheel attachment of Anson is a pliable structure that dangles downward from the bottom of the steering wheel. It is further understood from the quotation above that this steering wheel attachment is grasped by the driver's hand in use while the arms and hands are in the driver's lap. There is no teaching in Anson that the steering wheel attachment can be disposed of any location other than at the bottom of the steering wheel where it dangles for use. Moreover, Anson does not disclose that any body part is supported by the dangling portion only that the dangling portion is held on to.

If the steering wheel attachment of Anson were disposed in the upper portion of the steering wheel, it would be inoperable for the carrying out the purpose of the first and second section of steering wheel of claim 20. Further, the background of Anson teaches that the Anson-type attachment is to operate in a manner inapposite to what is claimed in claim 20. As such, a person of ordinary skill in the art would find that there is no teaching in Anson in which the hands are or other body part is supported by the steering wheel attachment as in claim 20 or there is an element of the Anson-type attachment that would deform under pressure out of the way of the operation of the steering wheel (as in claim 20) because of the only location of the disposition of the attachment is at the bottom of the steering wheel.

Given the foregoing, the steering wheel attachment of Anson at least does not teach the features of the second section being disposed <u>outward</u> at an angle from the plane across the face of the steering wheel (Anson extends rearward) and it does not

teach that the attachment would deform out of interference with the operation of the steering wheel as set forth in claim 20.

Applicant has demonstrated that claim 20 is not anticipated (or rendered obvious) by Anson and requests that the anticipation rejection based on this patent be withdrawn.

Claims 21-26 and 28/20 depend from claim 20. As such, each of these dependent claims includes all the features of claim 20. Therefore, claims 21-26 and 28/20 are not anticipated by Anson for the same reasons that claim 20 is not anticipated by this patent. Applicant has traversed the Examiner's basis for rejecting claims 21-26 and 28/20 for anticipation and respectfully requests that this rejection be withdrawn.

### D. Laubach Does Not Anticipate Claims 20, 27 and 28/27

The Examiner has rejected claims 20, 27, and 28/27 for anticipation based on Laubach. In formulating the rejection based on Laubach, the Examiner has not relied on any part of the disclosure in that patent but has annotated the drawings to allegedly show that Laubach teaches each and every feature of claim 20. The Examiner has indicated that reference nos. 7 and 8 of the knob 2 equates to the first section of claim 20 and reference no. 10 equates to the second section of this claim. Applicant submits that the Examiner's reliance on Laubach is misplaced.

Laubach states the following with regard to the knobs attached to the steering wheel (Page 1, line 43 - 71):

By particularly considering the Figures 2 and 3, it will be seen that the knobs 2 are secured to the rim of the wheel 1 by means of securing screws 4, these screws being threaded as indicated at 5 longitudinally through the knob 2, and extending for quite a distance through the entire length of the knobs, thereby efficiently bracing the same. The inner ends of the knobs 2 are concave as indicated at 6, so as to conform to the contour of the outer periphery of the wheel 1. Each knob 2 is also provided with a forwardly extending tapering portion 7, which is so constructed as to merge into the edge of the wheel and produce a smooth surface at the juncture of the wheel and knob 2. The rear face of each knob 2 also is slightly curved, as indicated at 8 for the purpose of merging into the surface of the wheel 1 and produce a smooth joint at all points of juncture between the knobs 2 and the periphery of the wheel 1.

Each knob 2 is provided with a plurality of finger sockets 9 upon the upper face thereof, and an enlarged head portion 10 at the outer end their of, for the purpose of facilitating the gripping of the knob and preventing the actual slippage of the hand of the operator from the knob 2. [Emphasis added]

The description of the knobs in Laubach make plain that the Examiner's position of anticipation based on this reference is also misplaced. First, the knobs of Laubach are rigidly connected to the steering wheel by the screws 5. As such, the knobs are meant remain in place in operation. This location is in a plane parallel to the plane across the face of the steering wheel.

The Examiner has annotated the drawings to attempt to show that enlarged head 10 is disposed outward at an angle from the plane across the face of the steering wheel. This is not supported.

The hands of the driver are supported by gripping the knobs in the defined finger recesses shown in the drawings. The heads 10 are enlarged for this sole purpose of preventing the hands from slipping off of the knobs. The heads 10 clearly are not disposed at an angle outward of the plane across the face of the steering wheel but are placed at the end of the knobs solely to act as a stop. Further, the heads 10 are not deformable out of interference with the operation of the steering wheel as set forth in claim 20. They are fixed in place along with the rest of the knobs. Accordingly, Laubach at least does not teach the features of the second section being disposed <u>outward</u> at an angle from the plane across the face of the steering wheel and knob of Laubach does not deform out of interference with the operation of the steering wheel as set forth in claim 20.

Applicant has demonstrated that claim 20 is not anticipated (or rendered obvious) by Laubach and requests that the anticipation rejection based on this patent be withdrawn.

Claims 27 and 28/27 depend from claim 20. As such, each of these dependent claims includes all the features of claim 20. Therefore, claims 27 and 28/27 are not anticipated by Laubach for the same reasons that claim 20 is not anticipated by this patent. Therefore, Applicant has traversed the Examiner's bases for rejecting claims 27 and 28/27 for anticipation and respectfully requests that this rejection be withdrawn.

#### III. Conclusion

In this Response, Applicant has traversed Examiner's (i) objection to the drawings, (ii) objection to the specification, (iii) and anticipation rejections under 35 U.S.C. 102(b) based on either Van Arsdel, U.S. Patent No. 2,118,540; Anson, U.S. Patent No. 2,134,020; and Laubach, U.S. Patent No. 1,575,848. As such, Applicant has placed the present application is in condition for allowance.

The present invention is new, non-obvious and useful. Reconsideration and allowance of the claims are respectfully requested.

Dated: April 4, 2006

Respectfully submitted,

Wayne M. Kennard

Attorneys for the Applicant

Wilmer Cutler Pickering Hale and Dorr LLP 60 State Street Boston, MA 02109

Tel: 617-526-6183 Fax: 617-526-5000

Attorney Docket Number: 114089.120US2



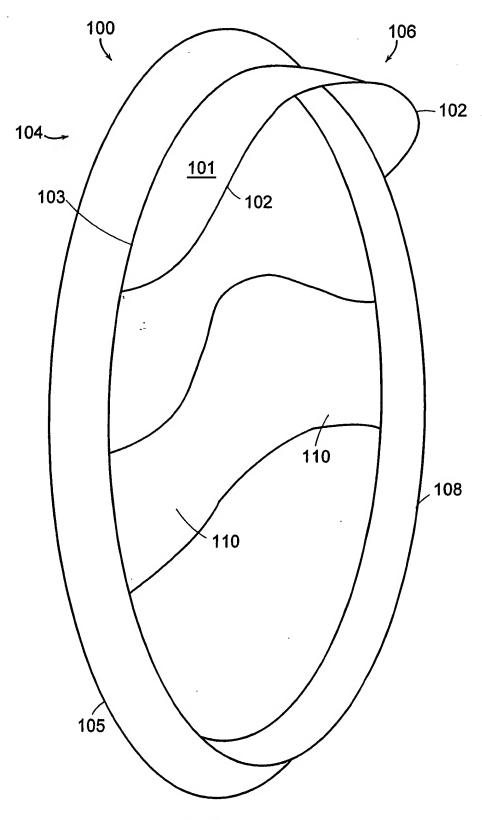


FIG. 1

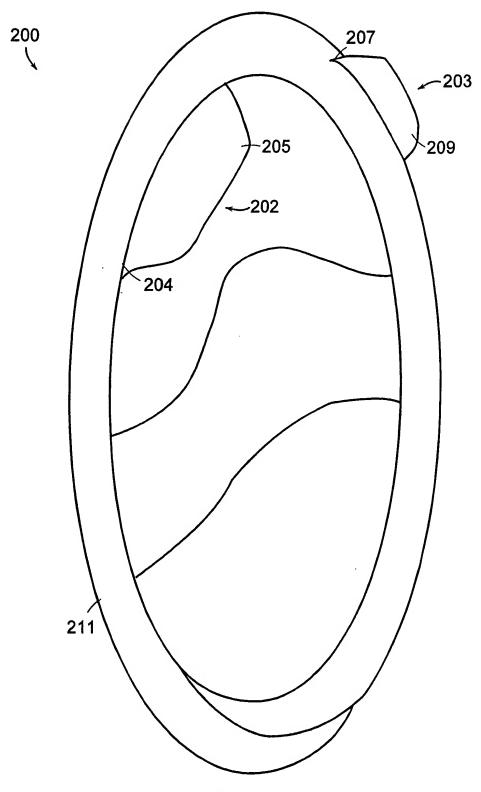
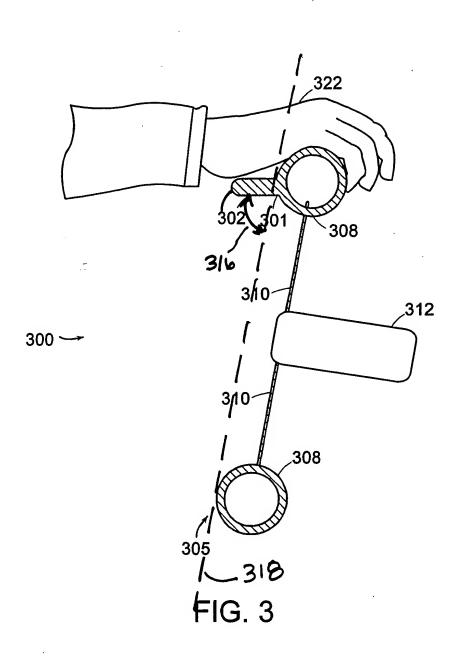


FIG. 2



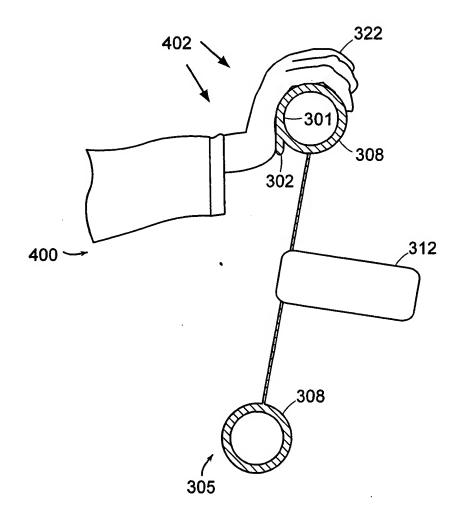
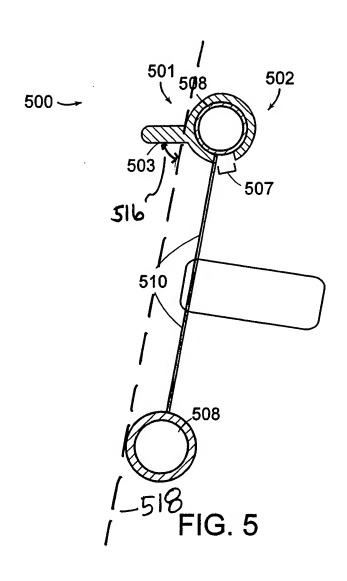


FIG. 4

5/6



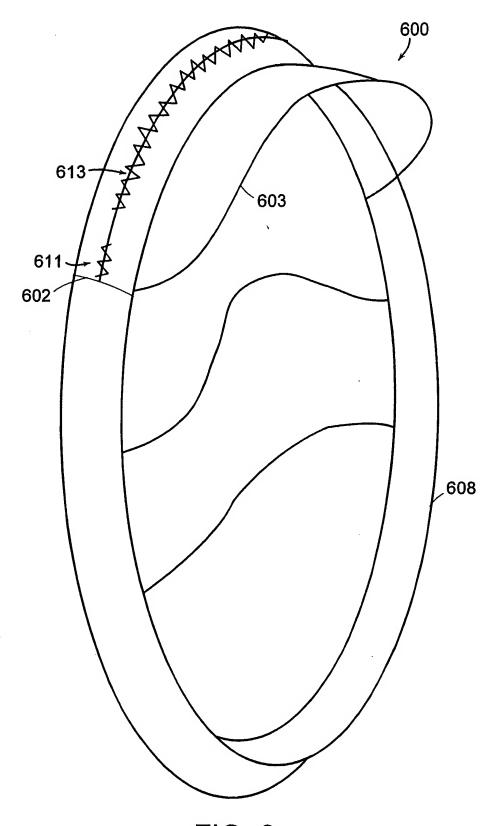


FIG. 6

JNITED STATES IEN AND TRADEMARK OFFICE UNITED STATES DE L'ARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. 10/720,821 Douglas B. Wilson 114089.120 5355 05/09/2006 **EXAMINER** 23483 7590 WILMER CUTLER PICKERING HALE AND DORR LLP LUONG, VINH **60 STATE STREET** ART UNIT PAPER NUMBER BOSTON, MA 02109 3682 DATE MAILED: 05/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

WILMER CUTLER PICKERING HALE and DORR LLP DOCKETING

Action Date: 819106

Action to be Taken: FINAL OFFICE ACTION

Docketed By: QW On: 51110



1 -	•	Application No.	Applicant(s)
• '	•	10/720,821	WILSON, DOUGLAS B.
	Office Action Summary	Examiner	Art Unit
		Vinh T. Luong	3682
The MAILING DATE of this communication appears on the cover sheet with the correspondence address			
Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).			
Status			
1)🛛 🛚	Responsive to communication(s) filed on <u>25 Ar</u>	<u>oril 2006</u> .	
		action is non-final.	
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims			
4) Claim(s) <u>20-28</u> is/are pending in the application.			
4a) Of the above claim(s) is/are withdrawn from consideration.			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>20-28</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or election requirement.			
Application Papers			
9) The specification is objected to by the Examiner.			
10)⊠ The drawing(s) filed on <u>25 April 2006</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).			
a) ☐ All b) ☐ Some * c) ☐ None of:			
1. Certified copies of the priority documents have been received.			
2. Certified copies of the priority documents have been received in Application No			
3. Copies of the certified copies of the priority documents have been received in this National Stage			
application from the International Bureau (PCT Rule 17.2(a)).			
* See the attached detailed Office action for a list of the certified copies not received.			
		<u> </u>	A Sinh T Luong
			Vinh T. Luong imary Examiner
Attachment(s)			
1) Notice	of References Cited (PTO-892)	4) Interview Summary	
2) Notice	of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da 5) Notice of Informal P	atent Application (PTO-152)
	ation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date	6) Other: Attachments	

Art Unit: 3682

1. The Amendment filed on April 5, 2006 has been entered.

2. The replacement drawings were received on April 25; 2006. These drawings are accepted by the Examiner.

- 3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 4. Claims 20-26 and 28/20 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Arsdel (US Patent No. 2,118,540).

Regarding claim 20, Van Arsdel teaches a fatigue relieving/preventing apparatus associated with a steering wheel 3 for controlling a vehicle comprising:

a first section 4 (i.e., horizontal section in Fig. 3) that connects to a peripheral portion 3 of the steering wheel 3; and

a second section 2 (i.e., a concave upward section in Figs. 3 and 5) that connects to and extends from the first section 4 at the peripheral portion 3 of the steering wheel 3, the second section 2 extends from the first section 4 outward at an angle (see angle  $\alpha$  in Figs. 3 and 5 of the Attachment 1) to a plane (Att. 1) across a face to the steering wheel 3, with the second section 2 inherently for supporting at least a portion of a vehicular operator's body (e.g., the hand as seen in Figs. 1 and 2) when pressure from the portion of the vehicular operator's body on the second section 2 is less than the pressure for deforming the second section 2 out of interference with the vehicular operator's ability to operate the steering wheel 3, and deforming out of interference with the vehicular operator's ability to operate the steering wheel when pressure from the portion of the vehicular operator's body on the second section is equal to or greater than

Art Unit: 3682

the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel 3. Ibid. right column on page 1, lines 29-54.

Regarding claim 21, the second section 2 is inherently deformable in at least one direction when deforming pressure is applied to such second section 2. Note that virtually anything will be deformed if enough pressure is applied to it. See the term "flexible" in Fredman v. Harris-Hub Co., Inc., 163 USPQ 397 (DC 1969).

Regarding claim 22, the second section 2 supports a portion of the vehicular operator's body when pressure from such body portion is applied in at least one direction.

Regarding claim 23, the steering wheel includes a steering wheel for controlling at least a nautical vessel, an aircraft, or a ground transportation vehicle.

Regarding claim 24, the second section 2 will inherently return to an original first position after deforming pressure is removed therefrom.

Regarding claim 25, the portion of the body supported by the second section includes at least a forearm, wrist, or hand.

Regarding claim 26, the first section 4 extends a length of a predetermined peripheral portion of the steering wheel 3.

Regarding claim 28/20, the first section 4 is inherently deformable. See the term "flexible" in Fredman v. Harris-Hub Co., Inc., supra.

Claims 20-26 and 28/20 are rejected under 35 U.S.C. 102(b) as being anticipated by 5. Anson (US Patent No. 2,134,020).

Regarding claim 20, Anson teaches a fatigue relieving/preventing apparatus associated with a steering wheel 10 for controlling a vehicle comprising:

Art Unit: 3682

a first section 13 that connects to a peripheral portion of the steering wheel 10;

a second section 11 extends from the first section at the peripheral portion of the steering wheel 10, the second section 11 extends from the first section 13 outward at an angle (see angle  $\alpha$  in Fig. 8 of Attachment 2) to a plane (Att. 2) across a face (Att. 2) to the steering wheel 3, the second section 11 inherently for supporting at least a portion of a vehicular operator's body (e.g., the hand) when pressure from the portion of the vehicular operator's body on the second section 11 is less than the pressure for deforming the second section 11 out of interference with the vehicular operator's ability to operate the steering wheel 10, and deforming out of interference with the vehicular operator's ability to operate the steering wheel 10 when pressure from the portion of the vehicular operator's body on the second section 11 is equal to or greater than the pressure for deforming the second section 11 out of interference with the vehicular operator's ability to operate the steering wheel 10.

Regarding claim 21, the second section 11 is deformable in at least one direction when deforming pressure is applied to such second section 11 since it is made of a flexible material such as rubber. *Ibid.* right column on page 1, lines 46-53. On the other hand, note that virtually anything will be deformed if enough pressure is applied to it. See the term "flexible" in *Fredman v. Harris-Hub Co., Inc., supra.* 

Regarding claim 22, the second section 11 supports a portion of the vehicular operator's body when pressure from such body portion is applied in at least one direction.

Regarding claim 23, the steering wheel 10 includes a steering wheel for controlling at least a nautical vessel, an aircraft, or a ground transportation vehicle.

Regarding claim 24, the second section 11 will return to an original first position after

Art Unit: 3682

deforming pressure is removed therefrom since it is made of a flexible material such as rubber. *Ibid.* right column on page 1, lines 46-53.

Regarding claim 25, the portion of the body supported by the second section includes at least a forearm, wrist, or hand.

Regarding claim 26, the first section 13 extends a length of a predetermined peripheral portion of the steering wheel 10.

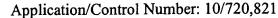
Regarding claim 28/20, the first section 13 is deformable since it is made of a flexible material such as rubber. *Ibid.* left column on page 2, lines 19-34. See also the term "flexible" in *Fredman v. Harris-Hub Co., Inc., supra.* 

6. Claims 20, 27, and 28/27 are rejected under 35 U.S.C. 102(b) as being anticipated by Laubach (US Patent No. 1,575,848).

Regarding claim 20, Laubach teaches a fatigue relieving/preventing apparatus associated with a steering wheel 1 for controlling a vehicle comprising:

a first section 7, 8 that connects to a peripheral portion of the steering wheel 1;

a second section 10 that connects to, and extends from, the first section 7, 8 at the peripheral portion of the steering wheel 1, the second section 10 extends from the first section 7, 8 outward at an angle (see angle  $\alpha$  in Fig. 2 of the Attachment 3) to a plane (Att. 3) across a face (Att. 3) to the steering wheel 1, the second section 10 inherently for supporting at least a portion of a vehicular operator's body (e.g., the hand) when pressure from the portion of the vehicular operator's body on the second section 10 is less than the pressure for deforming the second section 10 out of interference with the vehicular operator's ability to operate the steering wheel 1, and deforming out of interference with the vehicular operator's ability to operate the steering



wheel 1 when pressure from the portion of the vehicular operator's body on the second section 10 is equal to or greater than the pressure for deforming the second section 10 out of interference with the vehicular operator's ability to operate the steering wheel 1.

Regarding claim 27, the second section 10 includes at least two second sections 10 that each connects to the first section 7, 8 at separate locations (by comparing Applicant's Fig. 2 with Laubach's Fig. 1).

Regarding claims 28/20 and 28/27, the first section 10 is inherently deformable. See the term "flexible" in Fredman v. Harris-Hub Co., Inc., supra.

7. Applicant's arguments filed April 5, 2006 have been fully considered but they are not persuasive.

## Objections to the Drawings and Specification

The objections have been withdrawn in view of Applicant's replacement drawings and amendment.

#### **Art Rejection**

#### Van Arsdel

Applicant contended, inter alia, that:

A review of Figs. 3 and 5 as announced by the Examiner to attempt to show that the auto steering wheel handgrip of Van Arsdel is disposed at an angle a to a plane across the face of the steering wheel shows that the Examiner's position is misplaced. As the description above from Van Arsdel indicates, the auto steering wheel handgrip is disposed as shown in Figure 6 parallel to the plane across the face of the steering wheel not at angle to it. This is very clear because in each disposition of the auto steering wheel handgrip in the Figures, the handgrip is fixed in this parallel plane to support the thumb or part of the palm. It is also fixed so that it is not deformable so the driver can put extensive pressure on

it (and it will not move) for steering the automobile (see underscored sections in the quotation above). (Emphasis added).

#### The Examiner respectfully submits:

As noted in MPEP 2111, during patent examination, claims are given their broadest reasonable interpretation consistent with the specification. It is proper to use the specification to interpret what the applicant meant by a word or phrase recited in the claim. However, it is not proper to read limitations appearing in the specification into the claim when these limitations are not recited in the claim. See In re Paulsen, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994); and Intervet America Inc. v. Kee-Vet Lab. Inc., 887 F.2d 1050, 1053, 12 USPQ2d 1474, 1476 (Fed. Cir. 1989). (Emphasis added).

At the outset, Applicant's arguments are not based on the limitations appearing in the claims. In re Self, 213 USPQ 1, 5 (CCPA 1982). In fact, Applicant's claim 1 recites "a second section that connects to, and extends from, the first section outward at an angle to a plane across a face to the steering wheel." It is clear from claim 1 that it requires the second section of the handgrip, not the handgrip per se, extends from the first section outward at an angle to the plane across the face of the steering wheel. Therefore, Applicant's contention that "[a]s the description above from Van Arsdel indicates, the auto steering wheel handgrip is disposed as shown in Figure 6 parallel to the plane across the face of the steering wheel not at angle to it" is immaterial to the patentability of the claim. The issue is not whether Arsdel's handgrip disposed at an angle relative to the plane across the face of the steering wheel. Rather, the issue is whether Arsdel teaches the second section that connects to and extends from the first section outward at an angle relative to the plane across the face of the steering wheel.

In the case at hand, on page 1, right column, lines 13-28, Arsdel describes: "[t]he grip rest 2 is concave longitudinally and about half of the rest extends over and part way across the

Art Unit: 3682

steering wheel rim 3 in a manner to slope downwardly and inwardly of the rim. The outer edge 4 of the side, and 5 of the rear end of the *concave*, located above the rim, *extends up into a marginal flange* to be contacted by the inside of the ball of the thumb or by the bottom of the hand, depending upon which part of the hand is seated to rest." See also Arsdel's claims 1 and 2. Arsdel's concave upward section 2 extends from the first section 4 outward at an angle  $\alpha$  to the plane across the face of the steering wheel as seen in Figs. 3 and 8 of Attachment 1. Therefore, Arsdel's concave upward section 2 in Fig. 3 of Arsdel "reads on" Applicant's claimed second section.

In addition, Applicant's contention that Arsdel's handgrip "is also *fixed* so that it is not deformable so the driver can put extensive pressure on it (and *it will not move*) for steering the automobile" is unsupported by substantial evidence in the record. Indeed, on page 1, right column, line 49 through line 2, left column, page 2, Arsdel expressly describes:

My improved grip-rest may be formed integrally with the rim of the steering wheel as shown in Fig. 8, but I prefer to make it removable as an attachment for any make of car and also to make it adjustable to suit the requirements or fancy of the driver. (Emphasis added).

Particularly, Applicant's contention is in direct conflict with Arsdel's description on page 2, left column, lines 28-32:

The grip rest may be shifted along the length of the rim, or vertically around it by reversing the screw sufficiently to permit change of the rest to the new position, where it will be held again by tightening up on the screw. (Emphasis added).

Simply put, Arsdel explicitly teaches that the driver may loosen the screw 14 in Fig. 6 so that it is *deformable* in order that the driver can put extensive pressure on it and *it will move* for steering the automobile.

The support in the description of Arsdel that it will deform out of the interference with the operation of the steering wheel is on page 2, left column, lines 28-32. By loosening or reversing the screw 14 sufficiently to permit Arsdel's second section 2 shifted or vertically around the rim 3, the second section can be at the new position wherein the second section does not interfere with the operation of the steering wheel to suit the requirements or fancy of the driver.

For the reasons set forth above, the rejection based on Arsdel is respectfully maintained.

#### Anson

First, on page 10 of the Amendment, Applicant argued that the steering wheel attachment of Anson teaches away from the invention of claim 20. It is well settled that "[a]rguments that the alleged anticipatory prior art is 'nonanalogous art' or 'teaches away from the invention' or not recognized as solving the problem solved by the claimed invention, [are] not germane to a rejection under section 102." *Twin Disc, Inc. v. United States*, 231 USPQ 417, 424 (Cl. Ct. 1986) and MPEP 2131.05.

Second, Applicant asserted that there is no teaching in Anson that the steering wheel attachment can be disposed of any location other than at the bottom of the steering wheel where it dangles for use.

The instant assertion is likewise unsupported by substantial evidence in the record. For example, on page 1, left column, line 48 through line 32, right column, Anson expressly describes: "a means for attachment to the steering wheel, whereby the device may be readily attached to, or removed from, the wheel, and which may be quickly and easily shifted to various



positions on the wheel as dictated by the degree of driving comfort desired." Particularly, on page 2, left column, lines 62-72, Anson teaches:

At the same time, if it becomes desirable to move the attachment to a different position on the wheel rim, a slight movement of the grip portion toward the wheel rim will loosen the contact of strap 13 therewith, and the attachment can then be easily shifted to some other position on the wheel. Similarly, the attachment may be rotated about the wheel rim from its normal pendent position to a position within the periphery of the wheel when it becomes desirable to dispense with its use in operating the wheel. (Emphasis added).

As evidenced in the above quotation, Anson explicitly states that the driver may rotate Anson's attachment/handgrip about the wheel rim 10 to a position within the periphery of the wheel, *i.e.*, to a position shown in Applicant's Fig. 4 when the driver so desires. Anson's description above shows that Anson-type-attachment is operated in a similar manner to what is claimed in claim 20. As such, a person of ordinary skill in the art would find that there is a teaching in Anson in which the hands are or other body part is supported by Anson attachment as set forth in claim 20.

Third, in the same vein of arguments, Applicant argued: "the steering wheel attachment of Anson at least does not teach the features of the second section being disposed <u>outward</u> at an angle from the plane across the face of the steering wheel (Anson extends rearward) and it does not teach that the attachment would deform out of interference with the operation of the steering wheel as set forth in claim 20."

However, since Anson's attachment may be rotated about the wheel rim from its normal pendent position to a position within the periphery of the wheel when it becomes desirable to dispense with its use in operating the wheel, Anson's attachment clearly is capable to be rotated



outward such that the second section 11 is at an angle from the plane across the face of the steering wheel and out of interference with the operation of the steering wheel as claimed. On the other hand, it is well settled that a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. Inter. 1987) and MPEP 2114. In the case at hand, Anson teaches all structural limitations in the claims, therefore, Applicant's contention regarding the manner in which the claimed device is intended to be employed is unpersuasive.

#### Laubach

Applicant contended that the knobs of Laubach are rigidly connected to the steering wheel by the screws 5, thus, the knobs are meant remain in place in operation. Nevertheless, common sense teaches that the driver can unscrew Laubach's screws 5, and then screw or fasten the screws 5 at other position on the rim 6 of the steering wheel as the driver so desires. In other words, the position of Laubach's knobs is capable of being changed. As such, Laubach's knobs can inherently perform the functions recited in Applicant's claim. *In re Schreiber*, 128 F.3d 1437, 44 USPQ2d 1429 (Fed. Cir. 1997).

Applicant further asserted that the Examiner's drawings to attempt to show the enlarged head 10 is disposed outward at an angle from the plane across the face of the steering wheel is unsupported. Applicant's instant assertion is in direct conflict with the substantial evidence presented in Laubach's Fig. 2. This Fig. 2 shows that the second section of Laubach forms an angle with the face of the steering wheel as seen in Attachment 3. Note that things clearly shown

Art Unit: 3682

in reference patent drawing qualify as prior art features, even though unexplained by the specification as long as they are not inconsistent with the specification. In re Mraz, 173 USPQ 25 (CCPA 1972).

Finally, Applicant averred that the knob of Laubach does not deform out of interference with the operation of the steering wheel as set forth in claim 20. The Examiner respectfully submits that the driver can unscrew Laubach's screws 5, and then screw or fasten the screws 5 at other position on the rim 6 of the steering wheel such that the new position is out of interference with the operation of the steering wheel as the driver so desires. The operation to adjust or change the position of Laubach's handgrips is similar to the operation to adjust the handgrip of Arsdel since both Laubach and Arsdel use the screws as the fastening means. Since the position of Laubach's knobs is capable of being changed to be out of interference with the operation of the steering wheel, i.e., Laubach's knobs can inherently performed the functions recited in Applicant's claim, therefore, Applicant's claims are anticipated by Laubach. In re Schreiber and Ex parte Masham, supra.

For the foregoing reasons, the rejections under the art are respectfully maintained.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time 8. policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Page 13

Application/Control Number: 10/720,821

Art Unit: 3682

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

9. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Vinh T. Luong whose telephone number is 571-272-7109. The

examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Luong

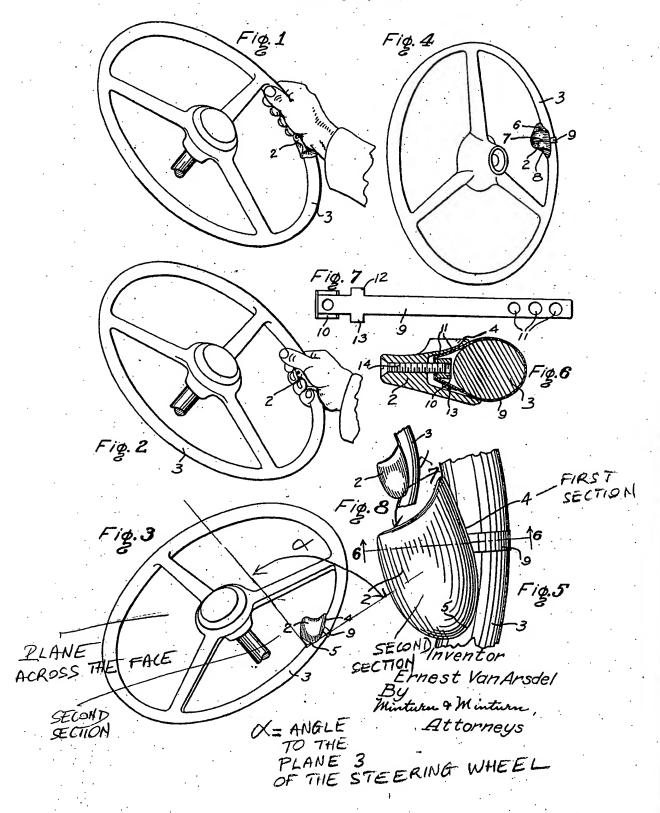
May 8, 2006

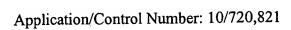
Vinh T. Luong Primary Examiner

Art Unit: 3682

## **ATTACHMENT 1**

AUTO STEERING WHEEL HANDGRIP Filed May 10, 1937





## **ATTACHMENT 2**

STEERING WHEEL ATTACHMENT Filed Sept. 30, 1937

<u>Fig</u> 1. SECONT PLANE/FACE Fig 4 <u>Fi</u>ø **6** <u>Fig</u> 8. Fig 5. Fig 7

Art Unit: 3682

# **ATTACHMENT 3**

March 9, 1926.

1,575,848

C. E. E. LAUBACH

STEERING WHEEL

Filed July 13, 1925

